

REMARKS

Applicants' attorney would like to thank the Examiner for careful consideration of this Application. Claims 1-19 are pending in the application. Claims 13-19 have been withdrawn. No amendments to the claims are submitted at this time.

Election/Restriction

Claims 13-19 stand withdrawn. The following group of claims has been distinguished by the Examiner:

Group I - Claims 1-12, drawn to a process of preparing a filled halobutyl elastomer and a process for improving abrasion resistance of an elastomer composition; and

Group II – Claims 13-19, drawn to a filler.

Applicants respectfully traverse the Restriction Requirement and request reconsideration.

The Examiner alleges the Claims of Group II, added with the Response and Amendment of September 29, 2006, represent an invention that is independent and distinct from the originally claimed invention. The Examiner further alleges that the filler of Claims 13-19 can be used as a binder in cement. Applicants respectfully disagree.

Applicants submit that the Claims of Groups I and II are related as a process for preparing a filled halobutyl elastomer and the filler used in the process. These groups of Claims are interrelated in such a way that they can be prosecuted in the same application in keeping with MPEP §802.01. Moreover, Applicants submit that there is no evidence in any of the prior art, of which Applicants are aware, that the fillers of Claims 13-19 are being used as a binder in cement.

Additionally, it is respectfully submitted that a search classification for the inventions of Groups I and II substantially overlap. Therefore, a search of Groups I and II can be concurrently performed and the Examiner will not be seriously burdened by searching and considering the inventions as described in all of the presently filed Claims.

Accordingly, Applicants request withdrawal of the Requirement for Restriction of Groups I and II.

Furthermore, Applicants do not admit, nor do Applicants waive the right to argue against, at a later date, the Examiner's statement that the groups of inventions are patentably distinct. Applicants expressly reserve the right to present the Claims of Groups I and II, or other claims in one or more divisional, continuation, or continuation-in-part applications at a later date.

Rejection under 35 U.S.C. § 102

Claims 1, 3, 6-10 and 12 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,337,391 to Clayton.

It is well settled that in order for a prior art reference to anticipate a Claim, the reference must disclose each and every element of the Claim with sufficient clarity to prove its existence in prior art. The disclosure requirement under 35 U.S.C. § 102 presupposes knowledge of one skilled in the art of the claimed invention, but such presumed knowledge does not grant license to read into prior art reference teachings that are not there. See Motorola Inc. v. Interdigital Technology Corp. 43 USPQ2d 1481 (1997 CAFC).

The Examiner alleges that Clayton discloses a silica filler that has a titanium compound of the formula given in column 1, applied to the surface and that one of ordinary skill in the art could "at once envisage" the filler of the current claimed invention. Applicants respectfully disagree.

Clayton fails to disclose "at least one organic compound containing at least one basic nitrogen-containing group and at least one hydroxyl group" as recited in independent Claims 1 and 12. In particular, as pointed out by the Examiner, Clayton describes titanium compounds and not organic compounds. The plain meaning of organic, as required under MPEP 2111.01, is submitted to be: carbon or hydrocarbon based compounds. The compounds described by Clayton and provided in the structures of column 1 are titanium based, and therefore cannot be considered organic compounds. Moreover, one of ordinary skill in the art would not "at once envisage" organic compounds based on the disclosure of Clayton. Thus, Clayton fails to disclose each and every element of Claims 1 and 12, and fails to anticipate the current claimed

invention. Accordingly, reconsideration and withdrawal of the Examiner's rejection is respectfully requested.

Rejections under 35 U.S.C. § 103

Claims 1-10 and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Publication No. 2002/0156173 to Hopkins et al. (hereinafter "Hopkins").

The Examiner alleges that Hopkins teaches a process wherein the components of independent Claims 1 and 12 are mixed and contends that it would have been obvious to combine these components in any order. Applicants respectfully disagree.

First and foremost, contrary to the Examiner's assertion, independent Claims 1 and 12 do not merely teach a different order of addition for the components of Hopkins. Rather, independent Claims 1 and 12 teach pre-reacting a mineral filler and an organic component to create a pre-reacted filler. Hopkins is completely devoid of any teaching regarding this or a similar step.

Moreover, the compounds of the invention show significantly enhanced properties over those of Hopkins which would be considered unexpected given the Examiner's rational for this rejection. In particular, the abrasion resistance exhibited by filled halobutyl elastomers prepared by the method of independent Claims 1 and 12 is improved over that of the filled halobutyl elastomers of Hopkins. For example, the filled halobutyl elastomer of Example 2a of the present invention (Table 4) has an abrasion volume loss (DIN Abrasion value) of 152 mm³. The best DIN Abrasion value provided by any of the Examples of Hopkins (Table 2) is 210 mm³. It is of note that in Example 2a of the present disclosure the organic compound is N,N-dimethylamino-ethanol (DMAE), a tertiary amine. Hopkins teaches that primary amines are preferred and an organic compound that is a primary amine is better than a secondary amine which is better than a tertiary amine (para [0071]). Thus, based on the teaching of Hopkins, the tertiary amine of Example 2a of the present disclosure would be expected to exhibit an inferior DIN abrasion to any filled halobutyl elastomer of Hopkins prepared using a primary or secondary amine organic compound. Applicants show that this is not the case. Therefore, the showing of improved and unexpected properties over those of

Hopkins provides evidence of the non-obviousness of the current claimed invention (See MPEP 2141 III). Therefore, the Examiner's rejection under 35 U.S.C. § 103(a) should be withdrawn.

Hopkins fails to render amended independent Claims 1 and 12 obvious. Claims 2-10 either directly or indirectly depend from and add further limitations to amended independent Claim 1, and are respectfully deemed allowable at least for the same reasons in connection with amended independent Claim 1. Accordingly, reconsideration and withdrawal of the Examiner's rejections is respectfully requested.

Claim 11 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Hopkins in view of U.S. Patent No. 6,180,710 to Hergenrother et al. (hereinafter "Hergenrother").

Hopkins fails to render independent Claim 1, on which Claim 11 depends, obvious, and Hergenrother fails to cure this deficiency. In particular, Hopkins fails to render independent claim 1 obvious because, as described hereinabove, Hopkins fails to teach or suggest a method including the step of "reacting at least one mineral filler with at least one organic compound" as recited in independent Claim 1. Hergenrother fails to cure this deficiency. Moreover, because Claim 11 depends from Claim 1, Claim 11 includes all of the limitations from Claim 1. Therefore, the combination of Hopkins in view of Hergenrother fails to render Claim 11 obvious. Accordingly, reconsideration and withdrawal of the Examiner's rejection is respectfully requested.

Applicants submit that the pending claims are in condition for allowance and notice to such effect is respectfully requested. Should the Examiner have any questions regarding this application, the Examiner is invited to initiate a telephone conference with the undersigned.

The USPTO is hereby authorized to charge any fees, including any fees for an extension of time or those under 37 C.F.R. 1.16 or 1.17, which may be required by this paper, and/or to credit any overpayments to Deposit Account No. 50-2527.

Respectfully submitted,

By

Jennifer R. Seng
Attorney for Applicants
Reg. No. 45,851

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LANXESS Corporation
Law & Intellectual Property Department
111 RIDC Park West Drive
Pittsburgh, Pennsylvania 15205-9741
(412) 809-2233
FACSIMILE PHONE NUMBER:
(412) 809-1054

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